

**Amendments to the Claims:**

There are no amendments to the claims and the listing of claims following are the original claims filed.

**Listing of Claims:**

1. (original) A method of driving the coil of an electrohydraulic valve with a PWM drive, comprising:  
transmitting a feedback signal to a digitizing device that is  
electrically connected to the electrohydraulic valve;  
sampling the feedback signal within the digitizing device to  
create a plurality of signal samples;  
transmitting the plurality of samples to an accumulator;  
averaging the plurality of samples within the accumulator to  
create an average value; and  
transmitting the average value to a closed loop control  
algorithm that generates a pulse width signal to drive the  
coil of the electrohydraulic valve.
2. (original) The method of claim 1 wherein the digitizing device is an AtoD converter.
3. (original) The method of claim 1 wherein the digitizing device is a DSP.
4. (original) The method of claim 1 wherein the digitizing device is a micro controller.
5. (original) The method of claim 1 wherein the algorithm is a PI algorithm.

6. (original) The method of claim 1 wherein the algorithm is a PID algorithm.

7. (original) The method of claim 1 wherein the accumulator resets when the algorithm sends the pulse width signal to the coil of the electrohydraulic valve.

8. (original) A method of driving a pulse width modulator comprising:  
transmitting a feedback signal from the pulse width modulator to  
a finite impulse response filter;  
calculating an average current in the signal with the finite  
impulse response filter; and  
generating a pulse width signal in response the average current  
in the signal via an algorithm.

9. (original) A method of driving the electric coil of a machine with a pulse width modulator comprising:  
transmitting a feedback signal to a digitizing device that is  
electrically connected to the electric coil of the machine;  
calculating the amount of average current in the coil with the  
digitizing device;  
transmitting the average current amount to an algorithm;  
generating a pulse width signal in response to the average  
current in the coil with the algorithm.